

Whatever happened to the ‘social’ science in *Social Science & Medicine*? On golden anniversaries and gold standards

NOTICE: this is the author’s version of a work that was accepted for publication in *Social Science & Medicine*. Changes resulting from the publishing process, such as peer review, editing, corrections, structural formatting, and other quality control mechanisms may not be reflected in this document. Changes may have been made to this work since it was submitted for publication. A definitive version is available at the following link:

<https://www.sciencedirect.com/science/article/pii/S0277953618301680>

Keywords: scholarly publishing, knowledge production, interdisciplinarity, social sciences, standardization

Introduction

In 2017, *Social Science & Medicine* celebrated its golden anniversary, with the section editors looking back over its 50-year history and presenting their thoughts on the journal’s past and future from the vantage point of their own disciplines (Coast 2018; Elliott 2018; Kawachi & Subramanian 2018; Panter-Brick & Eggerman 2018; Johnson & Acabchuk 2018; Timmermans & Tietbohl 2018; Yip 2018). Bracketed by an overarching editorial reflecting on the journal’s aims and scope and how these have played out in its pages (Timmermans 2018), the pieces provide a fascinating lens into the life of a journal that has been extremely successful in bringing the social sciences and medicine into dialogue – something rightly celebrated in the editorials.

As someone invested in the journal’s intellectual project and who has engaged with its content over the years in various capacities (as a reader, author and reviewer), I nevertheless felt there were absences – some alluded to but brushed over; others

elided entirely. In many respects, this is as it should be. Golden anniversaries are typically not the place where one airs one's laundry. But an occasion of this magnitude provides an invaluable opportunity to reflect on the possibilities – and conceptual limits – of the journal's unique interdisciplinary project.

Taking the form of a critical intellectual history, or perhaps more accurately a genealogy of sorts, I aim to complement but also counter the picture of *Social Science & Medicine* presented in the anniversary editorials, filling out the gaps and the silences – the “sharp edges” (Callard & Fitzgerald 2015: 3) of the interdisciplinary space the journal has created. As Fitzpatrick (2011: 10) notes, citing Donald Hall, “scholars often resist applying the critical skills that we bring to our subject matter to an examination of ‘the textuality of our own profession, its scripts, values, biases, and behavioral norms’”.

Although *Social Science & Medicine* has tried to carve out a space for what we might call ‘disciplined’ interdisciplinary dialogue, articles published in the journal have become increasingly standardized in form and content over the past fifteen years. This is immediately evident when back issues are compared with newer ones, where a degree of uniformity has begun to supersede the journal's prior epistemological and methodological eclecticism. In what follows, I aim to trace these developments via a textual analysis of the journal itself, identifying several pivotal moments in its history that arguably set *Social Science & Medicine* on its current path: namely, the emergence of a social epidemiology section and the rise of ‘qualitative research’ as a pan-disciplinary methodological category. Through this exercise, I use the journal as a lens into the contemporary circumstances of scholarly knowledge production about social science and medicine: both in the politics of such production and the

transformations in its machinery, which, in turn, have affected the very idea of it means to be a 'journal'.

The journal's evolution

Social Science & Medicine was founded in 1967 by Peter McEwan, a Scottish physician and sociologist (Olesen 1974), and aimed to bring together social science and medical perspectives on the "problems of human well-being" (SSM 1967: 1). While there were contemporaneous journals with a similar remit (e.g., the *Journal of Health and Human Behavior*), *Social Science & Medicine* was unique in its attempt to bring different disciplinary perspectives into conversation, while still retaining their distinct sensibilities via its section-based model.

According to the inaugural editorial, the mandate of *Social Science & Medicine* was to "serve the medical and social sciences so that the inter-relationships between them may multiply and the results that are achieved may grow in influence and effectiveness" (SSM 1967: 1). As the editorial made clear, an important context for the journal was the rise of bioethics and growing concerns about the economics of health care. For this reason, the journal contained a section on the fledgling sub-discipline of health economics, as well as fields we might more typically associate with the social and behavioural sciences, such as sociology, anthropology, geography and psychology.

In the decade following its emergence, *Social Science & Medicine* experienced exponential growth, jumping from six to 12 issues per year in 1973 and increasing again in 1977 to 18 issues per year (SSM 1977). Expansion brought with it increasing specialization and the new enlarged volume size included six general

issues with a primarily sociological emphasis and 12 discipline-specific publications colour-coded to reflect their orientation. This was followed by a short-lived experiment between 1978-1981 with dividing the periodical into different sub-journals. There initially were four sections: Medical Psychology and Medical Sociology; Medical Anthropology; Medical Economics; and Medical Geography. However, in 1981, two further sections were added, with medical psychology splitting into its own sub-journal and a sixth section on medical and social ethics introduced. Confused yet? Apparently, so were readers, because in 1982 the separate parts were merged back into one journal (McEwan 1981). Also in 1982, a health policy section was established in response to “increasing demand for rigorous academic research relevant to policy and practice of common interest to social scientists, health policy makers and professionals” (Yip 2018: 216).

The next substantive change occurred a decade later when publishing giant Elsevier took over publication of *Social Science & Medicine*, after acquiring Pergamon Press. This was followed in 1997 by Peter McEwan’s departure, when he stepped down from his role as editor-in-chief after almost thirty years with the journal (see McEwan 1997). In his valedictory editorial, McEwan praised the new publisher’s efficient handling of the journal’s production and their care in separating commercial and editorial considerations, but went on to state:

The one difficulty occurs over the point where the two sets of interests converge, namely subscription rates. Everyone is acutely aware of the apodictic financial problem whereby those regions of the world which stand to gain most are those which can least afford the opportunity. This is a problem that must be solved and there is hope that current negotiations may lead to at least a partial solution (McEwan 1997: v).

Despite McEwan's optimism, we now know that these negotiations proved a failure: today a personal subscription to the journal costs USD\$636 and an institutional subscription is almost USD\$10,000 (up from \$10 and \$30, respectively, in 1967, which equates to \$75 and \$225 in today's terms). This, of course, reflects the steep increase in journal pricing that occurred in the late 1990s, enabled by the rise of digital publishing and the concomitant emergence of 'Big Deals' amongst corporate publishers such as Elsevier (see Bergstrom et al. 2014).

The larger transformations in academic publishing engendered by the rise of the digital age deserve considerably more comment, but for the moment I primarily want to signal the journal's online appearance in this period as part of Elsevier's larger portfolio of journals. According to its online branding in 1997:

The journal publishes material relevant to any aspect of health from a wide range of social science disciplines (eg. anthropology, economics, education, ethics, geography, political science, psychology, social policy and sociology), and material relevant to any of the social sciences from any of the professions concerned with physical and mental health, and with health care practice, policy and organization (Pergamon 1997).

This blurb remained on the journal's website until 2004, when the overview of social science disciplines was changed to "anthropology, economics, geography, psychology, social epidemiology, social policy and sociology" (Elsevier 2004). This belated update in wording reflected a subtle but significant change in the journal's structure two years prior – most notably, the introduction of a social epidemiology section in 2002. This is not to say that social epidemiology had previously been without a presence in the journal, but it was editorial policy to place such content in the medical sociology section (Spruit & Kromhout 1986). However, while social

epidemiology has unquestionably been influenced by insights from the social sciences, its inclusion as a separate social science discipline arguably served to change the tenor of the journal in a number of unmarked but important ways.

Interdisciplinarity and the rise (and rise) of social epidemiology

In creating a social epidemiology section, *Social Science & Medicine* was “the first major journal to publicly recognize the existence of a field called ‘social epidemiology’” (Kawachi and Subramanian 2018: 243). That its inclusion as a social science discipline might be contentious was something acknowledged in Kawachi’s inaugural editorial introducing the social epidemiology section, where he noted:

An understandable reaction to all this activity [in the area of social epidemiology] has been the occasional outburst of suspicion and resentment on the part of social scientists who wonder aloud whether social epidemiologist[sic] aren’t plotting to take over the rest of the world. Does social epidemiology claim more of the social sciences turf as their own than they have legitimate grounds to do? (Kawachi 2002: 1740).

Kawachi’s observations about fears of an epidemiological ‘takeover’ seem particularly prophetic, given that the volume of papers submitted and subsequently published by epidemiologists has increased exponentially over the past 15 years. Kawachi and Subramanian tell us that, “In its first year, the Social Epidemiology office received 50 manuscript submissions; last year we handled almost 1000” (2018: 240). In light of the fact that the journal receives approximately 3,500 submissions per year (Timmermans 2018), this suggests that well over a quarter of submissions to the journal now come from epidemiology. Indeed, the explosion of research in this area has been so great that it culminated in the emergence of a sister journal in 2015: *Social Science & Medicine – Population Health*.

These changes in the journal reflect not only the growth of social epidemiology but also its increasing stature. Or, perhaps more accurately, they reflect the field's reclamation of ground that was lost with the rise of risk-factor epidemiology in the twentieth century, and the attendant shift from the population to the individual as the unit of analysis (Pearce 1996). No longer is social epidemiology a fledgling area in a discipline where "eminent epidemiologists seriously questioned whether problems such as poverty should be even considered a legitimate subject of inquiry by epidemiologists" (Kawachi and Subramanian 2018: 244). Instead, many of its core concepts have become mainstream – to the extent that it is arguably no longer clear how 'social epidemiology' differs from epidemiology itself (Galea & Link 2013). Indeed, the *Social Science and Medicine* website has dropped the 'social' entirely and now merely lists 'epidemiology' as a social science (Elsevier 2018), providing further evidence of the subfield's expansion within its home discipline.

On one level, these changes in the scope of the journal, its personnel, and subject matter can be understood as a continuation of *Social Science & Medicine's* longstanding concern to support develop fledgling disciplines and the "academic lifeline" it has provided "for those whose research does not fit into neat disciplinary boxes" (Coast 2018: 231). Moreover, as an explicitly hybrid product – one traversing social, psychological and biological chains of causality – social epidemiology might be seen as the logical inheritor of the journal's interdisciplinary mantle. After all, epidemiologists "compile, juxtapose, and connect data in ways not governed by any single discipline" (Fujimura & Chou 1994: 1023). But it would be naïve to assume that its growing primacy within the journal is incidental – as Callard and Fitzgerald (2015) have demonstrated, interdisciplinarity is far from the site of mutuality, reciprocity and exchange imagined by its champions.

Writing from their vantage point as social scientists working in faculties of health and medicine, Albert, Paradis and Kuper (2017: 85) observe that: “the meeting of disciplines always occurs within social spaces that are neither neutral nor sheltered from power struggles – whether between different scientific communities or among external stakeholders”. Likewise, while a long-term advocate of the possibilities for collaboration between anthropology and epidemiology, Janes (2017) notes that: “Ours was an intellectual, scholarly vision that in retrospect was naïve with regard to the social relations of science within the larger apparatus of what would become global public health” (2017: 55). Thus, while dialogue between the social and medical sciences may have become more robust, the standing of individual disciplines depends greatly on their methodological apparatuses and the status afforded to them.

This larger social context is alluded to in Kawachi and Subramanian’s observation that: “The emergence – and importantly, broader recognition and prominence – of social epidemiology as a legitimate field of inquiry in itself may have played some role in mainstreaming health in social sciences” (2018: 240). Certainly, it enabled the mainstreaming of certain concepts that sociologists and anthropologists had long taken for granted, such as what have become known as the ‘social determinants of health’. For example, in their preface to the 2014 edition of *Social Epidemiology*, Berkman, Kawachi and Glymour write:

When we published the first edition of this book in the late 1990s there were handfuls of papers scattered across journals to substantiate the role that our social world plays in shaping population patterns of health and illness. There is now so much new work that each of the chapters could be a book in itself. Where once there were 6 or 8

studies on a topic there are now meta-analyses of hundreds of papers from around the world (2014: xi).

Of course, their first statement is only true if the journals in question are limited to mainstream publications in the fields of health and medicine, given that the role of the social world in shaping health and illness is foundational to both medical anthropology and sociology and has a much longer history in both parent disciplines. Thus, it implicitly speaks to the larger economies of credibility in which knowledge circulates – economies referenced in the editors’ note that: “there are now meta-analyses of hundreds of papers”.

An implicit allusion to the evidence hierarchies formalized by evidence-based medicine and its intellectual offspring, the statement highlights the ways in which its notions of ‘evidence’ have become naturalized and the disadvantages faced by disciplines whose forms of evidence are not amenable to standardization and quantification (see Lambert 2006, 2009; Adams 2013, 2016). In this larger political environment, where ‘gold standards’ for evidence are conceptualized in increasingly universal terms, social epidemiology had a clear advantage over other traditional and hybrid fields embraced by the journal. After all, epidemiological styles of reasoning are embedded in evidence-based medicine itself (see Bell 2017).

The drive towards standardization and quantification expands

Although the contemporary prominence of social epidemiology in *Social Science and Medicine* speaks to the growing appetite for quantified forms of ‘social science’ research amenable to meta-analysis and other forms of standardization, these effects are evident across the entire journal, including papers based on qualitative research. This reflects the ways in which the rise of evidence-based policy and practice has intensified conversations about qualitative research and how the ‘quality’

of such can be appraised (Dixon-Woods et al. 2006; Lambert 2009). As Torrance (2017) notes,

Given the increasing pressure for the findings of research to be immediately ‘useful’ in the context of (so-called) evidence-based policy-making, the ‘what works’ movement, and ‘scientifically-based research’, then it is perhaps not surprising that issues of sampling, coding, validity, reliability and generalizability have come to dominate discussions of both the quality and teaching of qualitative methods (p. 75).

These broader transformations are reflected in the increasingly uniform format of research papers in *Social Science and Medicine*, which have become notably scientized in their structure, although this frame sits uncomfortably with the prevailing analytical and interpretive frameworks in fields such as anthropology (Béhague, Gonçalves & Victora 2008). They are also evident in the emergence of “Guidelines for Qualitative Papers”, which were introduced in 2010. Acknowledging that “various social science disciplines tend to have different conventions on best practice in qualitative research”, the document goes on to outline general guidance on best practice, with qualitative research framed “as method or technique, a ‘toolbox’ of procedures divorced from their philosophical undercarriage” (Eakin 2015: 5). However, as Dixon-Woods et al. (2006) point out, efforts to consider qualitative research as a unified field invariably impose a particular view of what ‘good’ qualitative research looks like. Standards, after all, are never neutral but codify, embody and prescribe particular ethics and values (Lampland & Star 2009; Timmermans & Epstein 2010).

In many respects, the rise of the category of ‘qualitative research’ itself can be understood as a manifestation of this larger context – as both a reaction to the value placed on quantification and standardization, and, some have argued, ironically

reinforcing it (Aldrich 2014). Although taken for granted today, the idea that there are pre-given methodologies for research is reasonably new (Wilson & Natale 2001) – a conceptual shift clearly evident in the pages of *Social Science & Medicine* itself.

Based on my keyword searches, the term ‘qualitative’ was used in its traditional sense of measuring something by its quality until the early 1980s, when references to ‘qualitative’ and ‘quantitative’ data became somewhat more common, reflecting the growing prominence of the distinction during this period as a broad methodological and epistemological identifier (see Morgan 2007).

From 1982, there were occasional references to “qualitative methods”, “qualitative research” and “qualitative analysis”, although typically in the context of a broader disciplinary discussion of methods. But it was not until 1990 that papers containing “a qualitative analysis” or “a qualitative study” in their title appeared in the journal – in the context of a special issue on this very topic (see volume 30, issue 11). From there, ‘qualitative’ studies unmoored from an explicit disciplinary perspective mushroomed, to the extent that in his valedictory editorial seven years later, McEwan (1997: vi) was able to point to “a greater willingness to accept the validity of qualitative methods” as one of the major changes in the journal under his tenure, despite the fact that the medical anthropology section, for example, had always published a high volume of research now defined under this label. In effect, the presence of such studies hadn’t necessarily changed, but they were increasingly being framed and evaluated in *methodological* terms, according to a set of *pan-disciplinary* standards.

Other forces served to intensify these processes of standardization in and beyond the journal, especially the digital turn in academic publishing in the late 1990s and

the ways it enabled new technologies for managing, classifying and disseminating manuscripts. Although such systems exist outside of the spotlight, they often have a critical role in standardization processes (cf. Timmermans & Berg 2003). To provide one example, previously manual processes for choosing reviewers (and their not-unproblematic reliance on the personal networks of editors) were increasingly supplemented by searchable electronic databases, and, later, automated reviewer recommendations, invariably organized around topical expertise. This, in turn, has facilitated the growing frequency of reviews by “scholars who are experts on the subject matter without necessarily being experts on the method” (Small 2009: 8; see also Béhague, Gonçalves & Victora 2008). As Small (2009) observes, for so-called ‘qualitative’ researchers, this has meant that questions are invariably raised about sample size and the generalizability of their findings.

The digital era, changing conceptions of the journal and the project of multidisciplinary

Beyond the ways in which such technologies have contributed to the standardization of the content of journals, they have equally transformed the ways we *read* them. Historically, unless one requested an individual reprint, it was virtually impossible to read an article without at least superficially engaging with the journal issue as a whole. Now, increasingly rare is the scholar who browses through an online journal ‘issue’ – itself arguably an anachronistic holdover from the print era, especially now that a number of journals have ceased print publication. Instead, many of us find journal articles via online search engines such as Google Scholar (Jamali & Asadi 2010; Souto-Otero & Beneito-Montagut 2013), and other mediated sources such as listservs, blogs and, increasingly, social media feeds.

In effect, despite the efforts to replicate analogue academic publishing in the digital realm, the affordances of this new medium have transformed the ways we engage with texts and the attendant meanings they hold. As Chartier has observed:

If texts are emancipated from the form that has conveyed them since the first centuries of the Christian era – the codex, the book composed of signatures from which all printed objects with which we are familiar derive – by the same token all intellectual technologies and all operations working to produce meaning become similarly modified... When it passes from the codex to the monitor screen the “same” text is no longer truly the same because the new formal mechanisms that deliver it to the reader modify the conditions of its reception and its comprehension (cited in Fitzpatrick 2011: 95-96).

Given that many of us now read journal articles on computer screens, decoupled from the larger context in which they are published, this has arguably served to blur the sense of provenance we normally associate with reading (cf. Fitzpatrick 2011), with attendant implications for how we conceptualize the role and purpose of journals. Indeed, technological transformations in publishing, in conjunction with escalating subscription prices and ideological initiatives such as the open access movement, have served to intensify questions about the value of the ‘journal’ as a container (e.g., Fitzpatrick 2011; Wood 2013). While such concerns have not dislodged the valorization criteria bestowed upon journals to any significant degree (cf. Eve 2013), it does mean that their role is changing. In the relatively unbounded environs of the digital realm, the journal’s historical function as a space facilitating dialogue and discussion amongst a community of scholars is potentially less important than its role in warranting the quality of its content, *especially* if the ‘community’ in question is not bound by particular philosophical, disciplinary or topical alignments.

Such transformations therefore have significant implications for a journal like *Social Science & Medicine*, with its aspirations towards interdisciplinary dialogue. While the journal continues to publish a range of scholarship, there are growing schisms in the sorts of content it publishes – to the extent that the journal looks very different when approached at the issue vs. the article level. This is something hinted at in the golden anniversary editorial, where various lines of separation in the content of the journal are discussed:

Compared to the previous decades, the last ten years have seen a much more sophisticated engagement with biology to address health inequities... Another line of separation lies between the contributions doing health research in the sense of making primary empirical discoveries about illness and medicine and those critically reflecting on health discourse and policy assumptions (Timmermans 2018: 204).

Closer inspection suggests that these lines of separation are broadly disciplinary, with the “more sophisticated engagement with biology” coinciding with the emergence of the social epidemiology section and the critical reflections on “health discourse and policy assumptions” most likely to be found in the medical sociology and anthropology sections. While it is possible to treat these differing perspectives as complementary when the journal is viewed as a whole, for the average reader they may well be perceived as incommensurate. Indeed, it is entirely possible for a reader, especially one whose acquaintance with the journal has been mediated primarily by search engines, to be unaware of the range of scholarship it publishes.

Concluding thoughts

During its 50-year history, *Social Science & Medicine* has gained a well-deserved reputation as the foremost journal facilitating dialogue between the fields of social

science and medicine. The appetite for such research is attested to by its extraordinary growth over this period and the countless seminal articles the journal has produced. However, while its commitment to publishing multidisciplinary scholarship has remained constant over the past fifty years, *Social Science & Medicine* has experienced significant transformations in its content during this period.

Such transformations are, of course, a natural consequence of consolidation and longevity. As research on social science and medicine changed, so too did the journal, with new sections being added and old ones disappearing, and its content fluctuating according to the changing preoccupations and disciplinary orientations of its publishing authors and editorial team. However, these transformations have, in their turn, engendered other perhaps less intended consequences – especially in terms of the type of papers increasingly published in the journal, with their increasing uniformity in presentation and thought.

Disciplinary exchanges take place against a background in which the epistemologies and methodologies of some fields are more highly valued than others and where their evidential weight is distributed accordingly. These relations of power are inevitable and not something that can be overcome through frank dialogue and mutual respect – which, as Callard and Fitzgerald (2015) note, is as much of a fantasy as the assumption of interdisciplinarity as a platform for equal exchange. But they do have clear implications for a journal like *Social Science & Medicine*, especially when considered in the context of the rise of evidence-based medicine and the processes of standardization and quantification that it has accompanied and intensified.

Given this broader social and political environment, it would have been surprising if epidemiology had *not* come to dominate the journal. Therefore, its ascendance has little to do with the intentions of its practitioners (and the editorial team of *Social Science & Medicine*) and everything to do with the circumstances in which it emerged and found a place. But its growing dominance has clear implications for who seeks to publish in the journal (and who doesn't) and what kinds of scholarship ultimately find a home. As Coast (2018: 231) points out in her golden anniversary editorial, "as with all areas of academic research, there are now multiple journals filling similar or slightly differentiated spaces, and it will be incumbent on the editors going forwards to maintain a distinctive and open approach... so that publishing in *Social Science & Medicine* remains an attractive option". As I have aimed to show, various engines of standardization have made it increasingly difficult to maintain this distinctive and open approach, with the net result that while certain sections of the journal (most notably, social epidemiology) have flourished, others have likely seen a corresponding drop in submissions.

Importantly, the forces of standardization are not just social and political, but mechanical as well. I have also sought to draw attention to the transformations engendered by the shift from print to digital scholarly publishing – transformations that I think require far more attention on the part of academics. In particular, new technologies for managing, classifying and disseminating manuscripts have not only affected the ways that manuscripts are assessed, but how we engage with articles, and, indeed, the very meanings attached to the concept of the 'journal' itself. While this has significant implications for all journals, it particularly affects those aiming to bring different disciplinary perspectives into dialogue. At the very least, it raises questions about whether it is still possible to "serve the medical and social sciences

so that the inter-relationships between them may multiply and the results that are achieved may grow in influence and effectiveness” in the ways imagined by *Social Science & Medicine*’s founding editor, and what this entails for the journal’s present path and future direction.

Acknowledgements

I’ve worked intermittently on this paper for several years, ultimately putting it aside as unpublishable – primarily because I couldn’t imagine *Social Science & Medicine* going for it, and I didn’t envision any other appropriate home for the piece. However, the journal’s anniversary celebrations convinced me that the topic was worth revisiting. To the editors’ credit, they were willing to consider analyses of the journal conducted in a more critical spirit and I particularly thank Stefan Timmermans for his feedback, which saved me from several embarrassing errors. During this paper’s lengthy gestation, I’ve discussed the basic ideas with various people (who’d probably prefer that I don’t name them here), but I am especially grateful to Judith Green and Ciara Kierans for their feedback on the manuscript, which helped me to refine and clarify various aspects of the arguments presented.

References

- Adams, V. (2013) Evidence-based global public health: Subjects, profits, erasures. In J. Biehl and A. Petryna (eds), *When People Come First: Critical Studies in Global Health*. Princeton, NJ: Princeton University Press, pp. 54-90.
- Adams, V. (ed) (2016) *Metrics: What Counts in Global Health*. Durham, NC: Duke University Press.
- Albert, M., Paradis, E. & Kuper, A. (2017) Interdisciplinary fantasy: Social scientists and humanities scholars working in faculties of medicine. In S. Frickel, M. Albert and B. Prainsack (eds), *Investigating Interdisciplinary Collaboration: Theory and Practice Across Disciplines*. Chapel Hill: Rutgers University Press, pp. 84-104.
- Aldrich, H.E. (2014) Stand up and be counted: Why social science should stop using the qualitative/quantitative dichotomy. *LSE Impact Blog*.
<http://blogs.lse.ac.uk/impactofsocialsciences/2014/11/28/stand-up-and-be-counted-social-science-qualitative-quantitative-dichotomy/>
- Béhague, D., Gonçalves, H. & Victora, C.G. (2008) Anthropology and epidemiology: Learning epistemological lessons through a collaborative venture. *Ciencia & Saude Coletiva*, 13(6): 1701–10.
- Bell, K. (2017) *Health and Other Unassailable Values: Reconfigurations of Health, Evidence and Ethics*. London: Routledge.

Bergstrom, T.C., Courant, P.N., McAfee, R.P. & Williams, M.A. (2014) Evaluating big deal journal bundles. *Proceedings of the National Academy of Sciences of the United States of America*, 111(26): 9425-9430.

Berkman, L.F., Kawachi, I. & Glymour, M.M. (eds) (2014) *Social Epidemiology*. Second Edition. Oxford: Oxford University Press.

Callard, F. & Fitzgerald, D. (2015) *Rethinking Interdisciplinarity across the Social Sciences and Neurosciences*. London: Palgrave Macmillan.

Coast, J. (2018) A history that goes hand in hand: Reflections on the development of health economics and the role played by Social Science & Medicine, 1967–2017. *Social Science & Medicine*, 196: 227-232.

Dixon-Woods, M., Bonas, S., Booth, A., Jones, D.R., Miller, T., Sutton, A.J., Shaw, R.L., Smith, J.A. & Young, B. (2006) How can systematic reviews incorporate qualitative research? A critical perspective. *Qualitative Research*, 6(1): 27-44.

Eakin, J. (2016) Educating critical qualitative health researchers in the land of the randomized controlled trial. *Qualitative Inquiry*, 22(2): 107-118.

Elliott, S.J. (2018) 50 years of medical health geography(ies) of health and wellbeing. *Social Science & Medicine*, 196: 206-208.

Elsevier (2004) Social Science and Medicine. Available at: http://web.archive.org/web/20041208193031/http://www.elsevier.com:80/wps/find/journaldescription.cws_home/315/description, accessed 5 January 2018.

Elsevier (2018) Social Science and Medicine. Available at: <https://www.journals.elsevier.com/social-science-and-medicine/>, accessed 10 January 2018.

Eve, M.P. (2013) The botnet: webs of hegemony/zombies who publish. In A. Whelan, R. Walker & C. Moore (eds), *Zombies in the Academy: Living Death in Higher Education*. Chicago: University of Chicago Press, pp. 107-117.

Fitzpatrick, K. (2011) *Planned Obsolescence: Publishing, Technology, and the Future of the Academy*. New York: New York University Press.

Fujimura, J.H. & Chou, D.Y. (1994) Dissent in science: Styles of scientific practice and the controversy over the cause of AIDS. *Social Science & Medicine*, 38(8): 1017-1036.

Galea, S. & Link, B.G. (2013) Six paths for the future of social epidemiology. *American Journal of Epidemiology*, 178(6): 843-849.

Jamali, H.R. & Asadi, S. (2010) Google and the scholar: the role of Google in scientists' information-seeking behaviour. *Online Information Review*, 34(2): 282-294.

Janes, C. (2017) A reflection on medical anthropology and epidemiology. *Medicine Anthropology Theory*, 4(2): 50-59.

- Johnson, B.T. & Acabchuk, R.L. (2018) What are the keys to a longer, happier life? Answers from five decades of health psychology research. *Social Science & Medicine*, 196: 218-226.
- Kawachi, I. (2002) Editorial. *Social Science & Medicine*, 54: 1739-1741.
- Kawachi, I. & Subramanian, S.V. (2018) Social epidemiology for the 21st century. *Social Science & Medicine*, 196: 240-245.
- Lambert, H. (2006) Accounting for EBM: Notions of evidence in medicine. *Social Science and Medicine*, 62(11): 2613-2620.
- Lambert, H. (2009) Evidentiary truths? The evidence of anthropology through the anthropology of medical evidence. *Anthropology Today*, 25(1): 16-20.
- Lampland, M. & Star, S.L. (eds) (2009) *Standards and Their Stories: How Quantifying, Classifying, and Formalizing Practices Shape Everyday Life*. Ithaca: Cornell University Press.
- McEwan, P.J.M. (1981) Editorial comment: Changes to the journal. *Social Science & Medicine*, 15C: 123.
- McEwan, P.J.M. (1997) Valedictory editorial. *Social Science and Medicine*, 44(8): v-viii.
- Morgan, D.L. (2007) Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research*, 1(1): 48-76.
- Olesen, V. (1974) Convergences and divergences: Anthropology and sociology in health care. *Medical Anthropology Newsletter*, 6(1): 6-10.
- Panther-Brick, C. & Eggerman, M. (2018) The field of medical anthropology in Social Science & Medicine. *Social Science & Medicine*, 196: 233-239.
- Pearce, N. (1996) Traditional epidemiology, modern epidemiology, and public health. *American Journal of Public Health*, 86: 678-683.
- Pergamon (1997) *Social Science & Medicine: Aims and Scope*. Elsevier. Available at: <http://web.archive.org/web/19970218084511/http://www.elsevier.nl/inca/publications/store/3/1/5/315.pub.shtml>, accessed 5 January 2018.
- Small, M.L. (2009) 'How many cases do I need?' On science and the logic of case selection in field-based research. *Ethnography*, 10(1): 5-38.
- Social Science & Medicine (1967) Editorial. *Social Science & Medicine*, 1(1): 1-5.
- Social Science & Medicine (1977) Editorial. *Social Science & Medicine*, 11(1): 1.

Souto-Otero, M. & Beneito-Montagut, R. (2013) 'Power on': Googlecracy, privatisation and the standardisation of sources. *Journal of Education Policy*, 28(4): 481-500.

Spruit, I.P. & Kromhout, D. (1986) Medical sociology and epidemiology: Convergences, divergences and legitimate boundaries. *Social Science & Medicine*, 25(6): 579-587.

Timmermans, S. (2018) Golden anniversary editorial. *Social Science & Medicine*, 196: 204-205.

Timmermans, S. & Berg, M. (2003) *The Gold Standard: the Challenge of Evidence-Based Medicine and Standardization in Health Care*. Philadelphia: Temple University Press.

Timmermans, S. & Epstein, S. (2010) World of standards but not a standard world: Toward a sociology of standards and standardization. *Annual Review of Sociology*, 36: 69-89.

Timmermans, S. & Tietbohl, C. (2018) Fifty years of sociological leadership at Social Science and Medicine. *Social Science & Medicine*, 196: 209-215.

Torrance, H. (2017) Be careful what you wish for: Data entanglements in qualitative research, policy and neoliberal governance. In N.K. Denzin & M.D. Giardina (eds), *Qualitative Inquiry in Neoliberal Times*. London: Routledge, pp. 73-83.

Wilson, J.B. & Natale, S.M. (2001) 'Quantitative' and 'qualitative' research: An analysis. *International Journal of Value-Based Management*, 14: 1-10.

Wood, M. (2013) Journals, repositories, peer review, non-peer review, and the future of scholarly communication. *Arxiv.org*. Available at: <https://arxiv.org/pdf/1311.4566.pdf>

Yip, W.C. (2018) Health policy: A reflection and look forward. *Social Science & Medicine*, 196: 216-217.